

Appl. No.: 10/733,697
Amdt. dated July 27, 2006
Reply to Office Action of April 28, 2006

Amendments to the Claims:

1. (Cancelled)
2. (Currently Amended) Apparatus according to Claim 37 ~~[[1]]~~, further including a controller for controlling the ~~coordinating~~ an operation of the ~~operational heater and the~~ regenerative heater.
3. (Original) Apparatus according to Claim 2, further including at least one temperature sensor in communication with the controller.
4. (Cancelled)
5. (Currently Amended) Apparatus according to Claim 37 ~~[[4]]~~, wherein the polymer melt generator ~~source~~ comprises ~~one of~~ an extruder or ~~and~~ a polycondensation reactor.
6. (Cancelled)
7. (Original) Apparatus according to Claim 37 ~~[[6]]~~, wherein the at least one spin ~~spinning~~ pump is configured to meter ~~meters~~ the polymer melt to the spinning nozzles ~~at least one spinning can through at least one melt conducting part~~.
8. - 9. (Cancelled)
10. (Original) Apparatus according to Claim 37 ~~[[9]]~~, wherein the ~~a total~~ length of each of the plurality of distribution lines ~~melt conducting parts~~ is substantially the same.
11. - 36. (Cancelled)

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37. (New) An apparatus for melt spinning multifilament yarns, comprising

a polymer melt generator for providing a polymer melt,
a spin beam which includes a plurality of spinning nozzles,
at least one spin pump connected to the polymer melt generator,
and a plurality of distribution lines leading from the spin pump
to respective ones of the spinning nozzles,

an operational heater for directly heating the spin pump
and the distribution lines of the spin beam to an operational
temperature, and

a separate regenerative heater for directly heating the
spin pump and the distribution lines of the spin beam to a
regeneration temperature above the operational temperature so as
to convert any organic deposits in the pump and distribution
lines to gases or vapors which may then be removed.

38. (New) The apparatus according to Claim 37, wherein the at
least one spin pump and the plurality of distribution lines are
housed within an enclosed cavity, and wherein the operational
heater comprises a heat transfer medium and means for
circulating the heat transfer medium through the cavity.

39. (New) The apparatus according to Claim 38 further
comprising a collection reservoir for receiving the heat
transfer medium from the cavity, and wherein the regenerative
heater comprises means for circulating hot air through the
cavity after the heat transfer medium has been transferred to
the collection reservoir.

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40. (New) The apparatus according to Claim 39, wherein the heat transfer medium comprises oil or Diphyl.

41. (New) The apparatus according to Claim 39, wherein the means for circulating hot air through the cavity comprises a blower and a filter capable of removing residue generated during the regeneration of the spin beam from the circulating hot air.

42. (New) The apparatus according to Claim 39, wherein the enclosed cavity includes an exhaust device for exhausting gases generated during a regeneration of the spin beam.

43. (New) The apparatus according to Claim 42, wherein the exhaust device includes a filter for filtering the gases generated during the regeneration of the spin beam.

44. (New) The apparatus according to Claim 37, wherein the operational heater is configured to heat the at least one spin pump and the distribution lines to an operational temperature of between about 250 to 330°C, and wherein the regenerative heater is configured to heat the at least one spin pump and the distribution lines to a regeneration temperature of between about 450 to 550°C.

45. (New) The apparatus according to Claim 37 wherein the regenerative heater is removably attached to the spin beam.

46. (New) The apparatus according to Claim 37 wherein the regenerative heater comprises electrical heating elements which

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are in contact with the at least one spin pump and the distribution lines.

47. (New) The apparatus according to Claim 46 further comprising a controller wherein the electrical heating elements can be selectively operated to act as both the operational heater and the regenerative heater.

48. (New) The apparatus according to Claim 37, wherein the at least one spin pump is connected to the polymer melt generator via a melt feed line, and wherein the apparatus further comprises means for heating the melt feed line to the regeneration temperature.

49. (New) The apparatus according to Claim 37 wherein the at least one spin pump and the plurality of distribution lines are housed within an enclosed cavity, and wherein the distribution lines are in the form of tubes which are positioned within the enclosed cavity.